Welcome to the SRS Pit Production Draft EIS Public Hearing

Draft Environmental Impact Statement for Plutonium Pit Production at the Savannah River Site

Public Hearing Webinar April 30, 2020

Jennifer Nelson, NEPA Document Manager
National Nuclear Security Administration (NNSA)
Department of Energy





Public Hearing Ground Rules

- All comments will be considered equally, whether spoken, mailed, or sent via electronic mail. Please remember that the comment period closes June 2, 2020.
- Any individual wishing to make an oral comment will have an opportunity to do so, within the time limitations of the hearing.
- The time allocated for each individual commenter is 3 minutes. Please limit your comment to the time allowed.
- If you are experiencing technical difficulties, please contact WebEx by telephone at 1-866-779-3239.





Public Hearing Ground Rules

- Unused time may <u>not</u> be deferred to another commenter.
 Each individual will be allowed 3 minutes for comment.
- If you have a written comment, please consider summarizing it during your oral comments and provide the written document for the record.
- Today's meeting is on the Draft Environmental Impact Statement for Plutonium Pit Production at the Savannah River Site. Please limit your comments to this topic.
- Please be respectful of others, even if you don't agree with their comments.





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Today's Virtual Hearing

- On April 3, 2020, NNSA published an NOA for the SRS Pit Production Draft EIS and notified the public of this hearing.
- In light of recent health concerns, NNSA elected to hold a virtual, online hearing instead of an in-person meeting.
- This approach:
 - Will allow NNSA to reach a broader audience with the same presentation
 - Allows nationwide participation in the hearing without the requisite travel costs
 - Has previously been implemented within DOE and other Federal agencies
 - Is consistent with CEQ and/or DOE NEPA implementing procedures
- In addition to today's hearing, the other methods for submitting comments on the Draft EIS remain available (i.e., email or postal mail).

Purpose of a Hearing

- NEPA requires an agency to hold a public hearing after they publish a Draft EIS.
- The purpose of a hearing is to allow the agency to present information about the Draft EIS and to allow the public to provide comments.
- This presentation on the Draft EIS will last approximately 20 minutes. The hearing will end at 9PM ET.
- This presentation will be followed by an opportunity for the public to provide oral comments.
- In the interest of fairness and to allow maximum participation, speakers will be allowed **3 minutes** to provide their comments.



NNSA's Pit Production Challenge

- Plutonium pits are critical components of every nuclear weapon, with nearly all current stockpile pits having been produced from 1978–1989. Today, the United States' capability to produce plutonium pits is limited.
- The 2018 Nuclear Posture Review announced that the United States will pursue initiatives to provide the enduring capability and capacity to produce no fewer than 80 plutonium pits per year beginning during 2030.
- NNSA is proposing to repurpose the Mixed Oxide Fuel Fabrication Facility (MFFF) at SRS to produce plutonium pits while also utilizing pit production capabilities at the Los Alamos National Laboratory (LANL).
 - Two-pronged approach—with a minimum of 50 pits per year produced at SRS and a minimum of 30 pits per year at LANL— is proposed as the best way to manage the cost, schedule, and risk of such a vital undertaking.

Pit Production NEPA Strategy

- The Complex Transformation Supplemental Programmatic EIS (SPEIS) evaluated production of 125 pits per year at five DOE sites, including use of the surplus plutonium disposition infrastructure at SRS (e.g., MFFF).
- In January 2020, NNSA completed a Supplement Analysis (SA) to the SPEIS to review the programmatic proposal to produce pits at LANL and SRS.
 - The SA identified no new significant circumstances or information relevant to environmental concerns.
- To implement the programmatic proposal to produce pits at SRS and LANL, NNSA is preparing this site-specific EIS for the proposal to produce a minimum of 50 pits per year at SRS and a site-specific SA to increase pit production beyond 20 pits per year at LANL.



How We Got Here

Stockpile Stewardship and Management (SSM) PEIS:

Establish small interim pit production capability at LANL

Complex Transformation

SPEIS: Evaluated production of 125 pits per year at five DOE sites, including use of MFFF infrastructure at SRS

2008

2018 Nuclear Posture

Review: Provide the enduring capability and capacity to produce no fewer than 80 plutonium pits per year beginning during 2030

2019

≈1992 1996 1999

DOE stops
Rocky Flats
operations in
1989 and decides
to not restart
plant in 1992

1999 LANL SWEIS

ROD: Authorized production of up to 20 pits per year

2008 LANL SWEIS:

Analyzed up to 80 pits per year at LANL; ROD affirmed 20 pits per year Current Proposal to Produce a Minimum of 50 pits per year at SRS and 30 pits per year at LANL

2018





NEPA Process

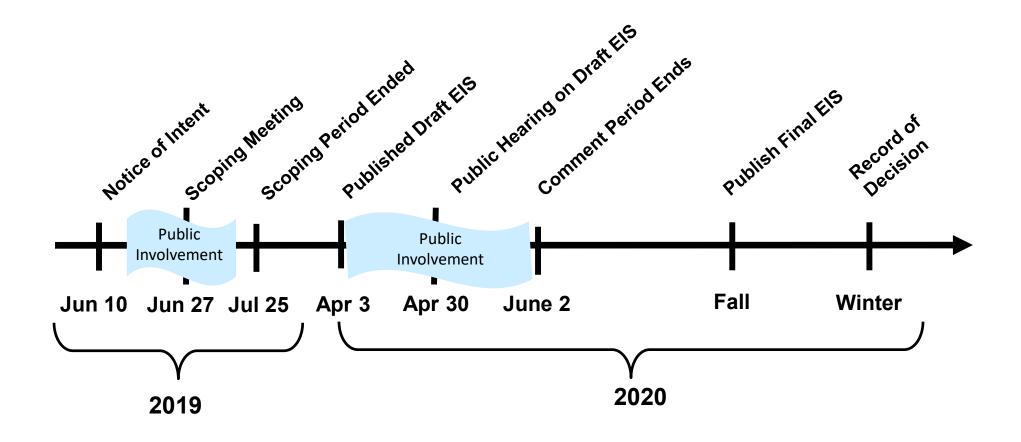
- Provide for public involvement and ensure that public officials consider the environmental effects of proposed actions and alternatives in order to foster better decision-making.
- EIS is required for any major federal action that may significantly affect the quality of the human environment.

 We are here
- Public comment period enables public participation in the EIS process.
 - Input from public comment period will assist NNSA in evaluating the potential environmental impacts of the EIS alternatives and making an informed Record of Decision (ROD).

Notice of Intent (NOI) 6/10/2019 **Public Scoping Process** 6/10/2019-7/25/2019 Draft EIS 4/3/2020 **Public Comment on Draft EIS** 4/3/2020 - 6/2/2020 Final EIS **Record of Decision**



SRS Pit Production EIS Schedule





Content of SRS Pit Production EIS



Introduction and Background
Purpose and Need
Proposed Action and Alternatives
Affected Environment
Environmental Impacts
Regulatory Compliance
Technical Appendices



SRS Pit Production EIS Alternatives



Alternatives

Proposed Action: Repurpose MFFF to produce a minimum of 50 pits per year beginning during 2030.

No Action Alternative: No repurpose of MFFF; no pit production at SRS; utilize the capabilities at LANL to meet the Nation's long-term needs for pit manufacturing.



Proposed Action

- Repurposing MFFF into the Savannah River Plutonium Processing Facility (SRPPF) would require:
 - Internal modifications and installation of manufacturing and support equipment
 - Construction of new facilities and modification of existing support facilities
 - Removal of existing facilities
 - Includes construction of a new Administration Building

Key Construction Parameters

- Land disturbance: 48 acres (all on previously disturbed land)
- Construction duration: 6 years
- Peak construction workforce: 1,800 persons
- Minimal electrical and water requirements
- Minimal wastes; no radiological wastes

Key Annual Operations Parameters

- Peak electrical usage: <10 MWe
- Domestic water usage: 7.2–7.9 million gallons
- SRPPF workforce: 1,100–1,220 persons
- Average radiation worker dose: 150 millirem
- TRU waste: 820–1,200 cubic yards
- Solid LLW: 7,800–13,100 cubic yards

Existing MFFF Complex



Repurposed MFFF (SRPPF)



EIS Analyses

- Land
- Air Quality
- Water Resources
- Ecological Resources
- Cultural Resources
- Waste Management
- Cumulative Impacts

- Infrastructure
- Socioeconomics
- Environmental Justice
- Human Health
- Accidents
- Transportation
- Intentional Destructive Acts

Proposed Action Impacts

- No new land disturbance
- SRPPF consistent with current industrial land use
- No visual impacts at or beyond SRS boundary
- Groundwater: < 2.2% of current water use at SRS
- No exceedance of air quality standards
- Minimal ecological impacts/no protected species
- No cultural resource impacts
- Infrastructure demands well within site capacity

Proposed Action Impacts

- All wastes would be managed by existing and planned waste management facilities
- Human health risks low; no latent cancer fatalities (LCFs) for public or workers
- Accident impacts low; risk of LCF from highest consequence accident is 0.049
- Transportation impacts low; less than 1 LCF and less than 1 traffic fatality annually

Proposed Action Impacts

- Socioeconomic impacts positive
 - Construction
 - 1,800 direct jobs
 - 1,134 indirect jobs
 - Impact to local economy: \$178 million
 - Operation
 - 1,110–1,220 direct jobs
 - 1,321–1,452 indirect jobs
 - Impact to local economy: \$166–182 million
- No environmental justice impacts

Record of Decision (ROD)

NNSA will consider input from:

- EIS
- Technical
- Policy
- Cost

If warranted, a future ROD would announce decision regarding repurposing MFFF to produce pits at SRS

How to Provide Your Comments

• At public hearing webinar

• By U.S. mail →

• By e-mail: NEPA-SRS@srs.gov Ms. Jennifer Nelson,
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National Nuclear Security Administration
Savannah River Field Office
P.O. Box A, Aiken, SC 29802

Note: Comment period ends June 2, 2020

Public Comments on Draft EIS

 The Draft EIS and ground rules are available on the NNSA NEPA Reading Room https://www.energy.gov/nnsa/nnsa-nepa-reading-room

Comment period closes June 2, 2020

• Email comments to: <u>NEPA-SRS@srs.gov</u>

Mail comments to: Jennifer Nelson

NEPA Document Manager

NNSA/SRFO

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